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 APPLICATION NUMBER
 FILING DATE
 GRP ART UNIT
 FIL FEE REC'D
 ATTY.DOCKET.NO
 DRAWINGS
 TOT CLAIMS
 IND CLAIMS

 10/417,729
 04/17/2003
 3625
 537
 Z2285/11
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LOWENSTEIN SANDLER PC 65 LIVINGSTON AVENUE ROSELAND, NJ 07068 ExamineR

**CONFIRMATION NO. 2433** 

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\*OC00000010440477\*

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#### Applicant(s)

Jason G. Tatge, Lenexa, KS; Daniel Scott Fritsch, Chapel Hill, NC;

#### Domestic Priority data as claimed by applicant

This application is a CON of 10/209,994 08/01/2002 and is a CON of 09/835,088 04/13/2001

Foreign Applications

If Required, Foreign Filing License Granted: 07/07/2003

**Projected Publication Date: 10/16/2003** 

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

Title

Methods and systems for purchase of commodities

**Preliminary Class** 

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Docket No. **Z2285/11** 

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## TO THE ASSISTANT COMMISSIONER FOR PATENTS

Box Patent Application Washington, D.C. 20231

Washington, D.C. 2023	1
Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.5	3(b) is a new utility patent application for an
invention entitled:  METHODS AND SYSTEMS FOR PURCHASE OF COMMODITIES	
and invented by:	
JASON G. TATGE DANIEL SCOTT FRITSCH	
DANIEL SCOTT FRITSCH	
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f. 🗵 Brief Summary of the Invention	
g. 🛛 Brief Description of the Drawings (if filed)	•
h. 🛛 Detailed Description	
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j. 🛛 Abstract of the Disclosure	

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Docket No. **Z2285/11** 

Total Pages in this Submission

		Application Elements (Continued)
3.	X	Drawing(s) (when necessary as prescribed by 35 USC 113)
	a.	⊠ Formal Number of Sheets5
	b.	☐ Informal Number of Sheets
4.	X	Oath or Declaration
	a.	☐ Newly executed (original or copy) ☐ Unexecuted
	b.	Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional application only)
	C.	☑ With Power of Attorney ☐ Without Power of Attorney
	d.	DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5.		Incorporation By Reference (usable if Box 4b is checked) The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6.		CD ROM or CD-R in duplicate, large table or Computer Program (Appendix)
<b>7</b> .		Application Data Sheet (See 37 CFR 1.76)
8.		Nucleotide and/or Amino Acid Sequence Submission (if applicable, all must be included)
	a.	☐ Computer Readable Form (CFR)
	b.	☐ Specification Sequence Listing on:
		i. CD-ROM or CD-R (2 copies); or
		ii. 🔽 Paper
	C.	Statement(s) Verifying Identical Paper and Computer Readable Copy
		Accompanying Application Parts
9.		Assignment Papers (cover sheet & document(s))
10.		37 CFR 3.73(B) Statement (when there is an assignee)
11.		English Translation Document (if applicable)
12.		Information Disclosure Statement/PTO-1449
13.		Preliminary Amendment
14.	X	Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15.		Certified Copy of Priority Document(s) (if foreign priority is claimed)
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Docket No. **Z2285/11** 

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		Accompanying Application Parts (Continued)
7.	×	Applicant claims small entity status. See 37 CFR 1.27.
		☐ (Optional) Small Entity Statement(s) - Specify Number of Statements Submitted:
8.		Additional Enclosures (please identify below):
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		Request That Application Not Be Published Pursuant To 35 U.S.C. 122(b)(2)
9.		and the second second beauty accused that this patent application not be
		Pursuant to 35 U.S.C. 122(b)(2), Applicant hereby requests that this patent application not be published pursuant to 35 U.S.C. 122(b)(1). Applicant hereby certifies that the invention disclosed in this application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing of the application.
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Docket No. **Z2285/11** 

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		CLAIMS	AS FILED			
For	#Filed	#Allowed	#Extra		Rate	Fee
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ndep. Claims 6 - 3 = 3 x \$42.00				\$126.00		
Multiple Dependent Claims (check if applicable)						\$0.00
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## METHODS AND SYSTEMS FOR PURCHASE OF COMMODITIES

This application is a continuation of Application No. 10/209,994, filed on August 1, 2002, entitled Methods And Systems For Purchasing Commodities With Concomitant Hedging, which application is hereby incorporated herein by reference.

### 1. FIELD OF THE INVENTION

The invention is directed to methods and systems for purchasing commodities with concomitant hedging.

### 2. BACKGROUND OF THE INVENTION

Today, the Internet hosts a multitude of sites and protocols whereby the sale of goods and commodities can be consummated. The majority of such sites and protocols are seller oriented where a seller advertises goods or commodities to a multitude of buyers to achieve an optimized selling price. The seller's goal is straightforward, i.e., once the goods are sold, the seller has achieved his objective.

Commodity buyers often hedge their purchases against the listed exchange rate for the same or a different commodity. For example, buyers of agricultural products often sell futures contracts at the exchange rate listed by the Chicago Board of Trade to hedge their purchases (i.e., take a short futures position). These "hedge purchasers" face a more complicated series of transactions than do sellers. Thus, it is not surprising that the seller-oriented platforms currently available on the Internet do not fully satisfy the hedge buyer's needs. First, the buyer must advertise a bid price to a plurality of sellers. Since the buyer will hedge his purchase, his bid price is based on the exchange rate listed for a particular hedge commodity (which may be the same commodity he is seeking to purchase). Since the hedge commodity's exchange rate is constantly fluctuating, the buyer must constantly adjust and post his current bid price. Furthermore, once the buyer buys, he should immediately complete the hedge transaction to avoid adverse price shifts of the hedge commodity.

A futures contract is a standardized contract to make or take delivery of a commodity or financial instrument at a predetermined time and place. Thus, a futures contract locks in a price for a future date. Some of the most popular futures contracts traded in the United States today are equity-based contracts such as the Dow Jones Industrial Average; interest rate contracts such as Treasury bonds and Treasury notes; agricultural contracts, such as corn, soybeans, and wheat; and precious metals, such as silver and gold.

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Hedging is the practice of offsetting the price risk inherent in any cash market position by taking an equal but opposite position in the futures market. Hedgers use the futures markets to protect their business from adverse price changes. Thus, Hedgers try to protect themselves from an inherent price risk associated with a future purchase or sale of an asset. A wide variety of institutions and individuals hedge, such as mortgage bankers, stock portfolio holders, food processors, and farmers. The classic example of a hedger using the futures market as a risk management tool is a farmer. Buyers of commodities often take a short futures position, which is a position in the market where one has sold futures contracts to offset risk. Because of the complexity of completing a transaction, hedge buyers generally spend long hours on the phone to transmit bids, consummate sales, and place their hedge.

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Grain elevators provide facilities for elevating, storing, discharging, and sometimes processing grain. Country elevator operators, who generate a majority of their revenue through put-through and storage charges, have little desire to take on risk and thus hedge grain purchases against the futures price listed at the Chicago Board of Trade. Currently, grain elevators and grain producers conduct a majority of their business buy phone. Elevator operators are constantly on the phone trying to find grain. Once the buyer locates a seller for the desired grain, he then needs to negotiate the price. After the grain is purchased, the buyer then needs to call a futures broker to place a futures hedge on the grain just purchased. Then the buyer starts the process all over again. An elevator operator may have anywhere from 100 to 2,000 different producers calling to check prices daily. It is very difficult for a buyer to remember who is offering what amount and at what price. With the futures price constantly changing, local basis levels constantly changing, and the phone-ringing non-stop it is difficult to execute transactions in an orderly fashion.

There are several factors that can simultaneously affect the price a grain elevator operator is willing to pay at a given time. In general, an elevator operator calculates his bid price based on a basis, which is the difference between the grain's current local cash price for a specific delivery period and the futures option price the commodity is being put against. The elevator buys the product this way because it makes it easier for them to hedge their purchases. When a grain producer calls to get a bid for his product, the elevator operator adds or subtracts his local cash basis from the Chicago Board of Trade futures price to come up with a flat price to quote to the grain producer.

Because hedge buyers (e.g., grain elevator operators) face a complicated series of transactions that require numerous hours on the telephone, there is a need for improved methods and systems for purchasing commodities with concomitant hedging.

## SUMMARY OF THE INVENTION

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The invention is directed to methods and systems for purchase of commodities with concomitant hedging. Multiple buyers and sellers can participate in the platform for any number of different commodities. The invention enables a prospective buyers of commodities the opportunity to automatically procure the commodity at a desired basis level when a seller's price matches a buyer's basis bid, and automatically place an electronic order for a listed commodity to hedge the purchase ("hedge commodity"). The methods and systems of the invention further enable the sellers to: (1) place on offer to sell to a buyer or place the same offer to sell to multiple buyers; (2) view buyer information and select the particular buyers with which to transmit sell data, e.g., based on buyer's requested delivery point; (3) continually monitor the buyers' basis bids, for example, from a Web site; (3) be notified when the sell data conforms to the buy data of a buyer. In one embodiment, sellers will manipulate their sell data to conform to the buyer's bid data, thus, the cheapest buyer will typically prevail and win the seller's offer. A buyer can specify multiple delivery options; his basis will typically reflect, among other variables, his costs corresponding to the particular point of delivery.

## 4. BRIEF DESCRIPTION OF THE FIGURES

These and other features, aspects, and advantages of the invention are better understood with regard to the following description, appended claims, and accompanying drawings where:

- FIG. 1 is a flow chart of a preferred embodiment of the invention for purchase of a commodity with a concomitant hedge transaction;
  - FIG. 2a illustrates a preferred network for use in the invention;
  - FIG. 2b illustrates a typical server for use in the invention;
- FIG. 3 is an outline of the preferred system architecture and operation of the methods and systems of the invention;
  - FIG. 4 is an illustration of a central station of the invention; and
  - FIG. 5 is a diagram summarizing the software of the invention.

## 5. <u>DETAILED DESCRIPTION OF THE INVENTION</u>

FIG. 1 is a flow chart of a preferred embodiment of the invention. First, as indicated in Box 1, a buyer (or multiple buyers) provides bid data on the invention's network platform for a commodity desired to be purchased ("purchase commodity") using the methods and systems of the invention. According to the invention, the commodity the buyer whishes to

purchase can be any item or service (see definition section 5.2). It is not required for the purchase commodity to be listed on an exchange. Each buyer participating in the platform may desire to purchase the same or a different commodity. Bid data typically includes the bid price, quantity desired, and point of delivery and, optionally, other relevant data. Of course, relevant data will vary depending on the commodity. Examples of relevant data include, but are not limited to, quantity sought, quality, delivery date, and delivery place etc.

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Typically, a buyer selects the listed commodity with which he will hedge his purchase (i.e., the hedge commodity) to calculate the bid price. The methods and systems of the invention can receive and process real-time exchange rate quotes for listed commodities. Using these real-time quotes, the methods and systems of the invention can automatically and continually calculates and update the bid price based on the hedge commodity's real time quote. For example, the invention can automatically and continually calculate and update the buyers' bid prices by subtracting the buyer's basis from the real-time exchange-rate quote for the hedge commodity. Alternatively, the buyers can calculate a bid separately from the software and enter it manually.

As illustrated in Box 2, the buyers enter information respecting a hedge transaction. Typically this includes the hedge commodity to be purchased or sold, the amount, the introducing broker or futures clearing merchant from which it can be purchased, and ID or account numbers required by the introducing broker or futures clearing merchant. Typically, the hedge transaction will be executed at the time that a seller agrees to sell a commodity on the terms specified by the buyers.

Next, as indicated in Box 3, one or more sellers will review the bid data and submit sell data for the purchase commodity to the network platform. Sell data includes sell price and other relevant data, herein termed "sell data parcels". As with the bid data, relevant sell data will vary depending on the commodity, for example, quantity for sale, quality, and proposed delivery date and place etc.

Next, as indicated in Box 4, the methods and systems of the invention monitor the bid and sell data to identify conformance between the bid data and a particular seller's sell data. Depending on the commodity, conformance might require only a match in sell and buy price or may require the seller's commodity to conform with other specifications, such as quality, age, color, or type etc.

Preferably, as indicated in Box 5, when a conformance occurs, the program automatically alerts the conforming buyer and conforming seller (preferably by e-mail) and automatically discontinues that buyer's bid.

As indicated in Box 6, the methods and systems of the invention automatically transmit the hedge transaction programmed by conforming buyer to an introducing broker or futures clearing merchant. For example, a futures clearing merchant, such as Advanced Trading, will electronically send a futures order to a trade executor, such as EDFMAN, which has trading terminals or the floor of the Chicago Board of Trade.

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Preferably, the methods and systems of the invention are Web based and located on a Web server. In a preferred embodiment, the Web site will further comprise information relevant to the commodities purchased and sold. For example, a Web site of the invention directed to agricultural commodities might display relevant current news, weather, and market information as well as a "Local Trends" section that allows the buyer to provide their own daily commentary of local information.

A preferred network for use in the invention is illustrated in FIG. 2a. A plurality of personal computers 20, are connected to an Internet service provider (ISP) 25 via a network connections 30, such as a model and dialup telephone line, a digital subscriber line ("DSL"), or a cable modern connection. Internet service provider 25 interfaces with network 35, which comprises a plurality of Web content servers 40, including servers for control of domainname resolution, routing, and other control functions.

The personal computers typically are configured with common Internet tools, including a Web browser to access servers 40 and specialized programs to connect with certain services. These services include electronic mail, one-to-many messaging (bulletin board), on-line chat, file transfer, and browsing. Browsing is effected using the Hypertext Transfer Protocol (HTTP), which provides users access to multimedia files using Hypertext Markup Language (HTML). The entire system of personal computers, internet service providers, and servers is called the Internet. The collection of servers 40 that use HTTP comprise the World Wide Web, which is the Internet's multimedia information delivery system.

FIG. 2b provides the details of a typical server 40 for use in the invention. Server engine 45 receives HTTP requests to access the Web pages 50 identified by Uniform Resource Locator ("URL") and provides the Web pages as an interface to the requesting personal computer 20. The databases 55 contain various tables storing information such as buyer and seller information.

### 5.1 SYSTEM ARCHITECTURE AND OPERATION

Referring to FIG. 3, a preferred embodiment of the invention comprises central station 100, buyer interface 200 (e.g., a Web page), buyer interface provider 250 (e.g., a computer used to access and display a buyer interface Web page), one or more seller interfaces 300, and their corresponding seller interface providers 350. In operation, a buyer enters hedge transaction data and bid data, including a bid price through interface 200 for transmittal to central station 100. The buyer can continually update the bid price and other bid data as appropriate. Alternatively, since the software of the invention can receive real-time exchange-rate quotes for listed commodities; the buyer can rely on software of the invention to automatically and continually calculate a bid price based on the real-time quote. For example, the software of the invention can automatically and continually calculate a bid price by subtracting the buyer's basis from a real-time exchange-rate quote for a particular commodity. Typically, the buyer selects the commodity with which he will hedge his purchase (i.e., the hedge commodity) to calculate the bid price.

Sellers review the bid data through seller interfaces 300 and transmit sell data,

including a sell price to central station 100. The software of the invention monitors the bid

interface 450 to hedge the buyer's purchase. Each of buyer interface 200, seller interface

300, and trading interface 400 communicate with central station 100 via network connections

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and sell data and identifies when the sell data conforms to the bid data (e.g., a match of sell price with buy price). When conformance occurs, the software of the invention automatically alerts the buyer and seller (preferably by e-mail), automatically discontinues the bid, and automatically transmits the hedge transaction to introducing broker or futures clearing merchant 400 respecting a listed commodity (selected by the buyer) by way of trading

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Any conventional personal computer, computer workstation, or server with sufficient memory and processing capability may be used as central station 100. In one embodiment, central station 100 is a buyer's personal computer. In another embodiment, central station 100 is an application service provider or a Web server providing a Web page. As is understood by those of skill in the art, an application service provider is an entity that offers individuals and enterprises access to applications and related services through the Internet (or other network) that would otherwise have to be located in local computers and/or devices.

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As shown in FIG. 4, central station 100 comprises central processor unit ("CPU") 110, data-storage device 120, software of the invention 140, random access memory ("RAM") 145, and operating system 165.

Examples of processors suitable for use in the invention include, but are not limited to, those sold by Sun Microsystems, Motorola, and Intel.

The RAM should preferably be of the error-correcting code (ECC) memory type and should be from 512 MB to 1GB in total capacity.

The operating system should be robust and provide for security of the data in storage. Exemplary operating system include LINUX®, UNIX, Windows 2000®, or Windows NT®.

Data-storage device 120 stores information necessary to process transactions. The data-storage device should provide for re-writable data and should provide redundancy via mirroring or error correction (RAID), and it should have a fast interface to the operating system so that data can be made readily available to the network. Suitable data-storage devices include hard disks. Data-storage device 120 comprises: (1) buyer table 122; (2) seller table 124; (3) bid and sell price table 126; and (4) commodities table 128.

Buyer table 122 stores buyer information, such as name, buyer identification number, contact information, email address, etc.

Seller table 124 stores seller information, such as a unique seller identification number, contact information, email address, payment preferences, credit, delivery record, type of business, and commodities sold, etc. The seller table contains a mapping from each seller identification number to the seller interface that is provided by a collection of dynamic web pages.

Bid and sell-price table 126 stores bid prices and sell prices corresponding to the commodity bid on and the buyer's and seller's identity as well as other information about the pending transaction (e.g., quantity sought, quality, delivery date, and other relevant information).

Commodities table 128 stores a list of commodities that can be traded on the platform as well as information about each commodity. Relevant information will vary depending on the commodity. For example, a grain elevator bidding for grain might maintain a list of past bids, grain futures prices, basis information, supply issues, etc.

In a preferred embodiment, database software, such as SQL Server, manufactured by the Microsoft Corporation, is used to create and manage the database and tables. Other relational database products (e.g., those manufactured by Oracle Corp.) can be used for data storage management.

Referring to FIG. 3, buyer and seller interfaces 200 and 300 display or transmit, a user friendly set of pictures, text, or voice statements that provide instructions and protocols indicating how a user is to communicate with and use the platform of the invention and direct

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the computer software of the invention located on the user's computer 250 or 350 or on central station 100. For example, the interfaces will prompt for and accept passwords, provide prompts for data entry, and display information stored in the data tables, etc. Interface 200 and 300 are accessed and displayed by an interface providers 250 and 350, preferably, personal computers having an input device, such as a keyboard, mouse, or conventional voice-recognition software package; a display device, such as a video monitor; and a network connection such as a modem.

## 5.1.1 Software Of The Invention

FIG. 5 is a diagram summarizing the software of the invention, which comprises:

- 10 (1) a program to receive real-time commodity exchange-rate quotes from an exchange, and introducing broker, or futures clearing merchant;
  - (2) a program to automatically calculate a buyer's bid based on the exchange-rate quote for a commodity;
    - (2) a database for receiving dynamic data;
  - (3) a program for displaying, entering, and transmitting bid and sell price data to the buyer and seller interfaces;
    - (4) a program to identify when sell data conforms to bid data, withdraw buyer bid, and alert the buyer and seller of the match; and
    - (5) a program to automatically transmits a hedge transaction to an introducing broker or futures clearing merchant.

The software of the invention comprises a program to receive and process real-time exchange rate quotes for listed commodities (505). This functions in conjunction with a program that can automatically and continually calculate and update the bid price based on the real time quote (510).

Software of the invention comprises dynamic database (515) for receiving dynamic data, such as the real-time exchange-rate quotes.

The software of the invention further comprises a program (520) for displaying, entering, and transmitting bid and sell-price data from and to the buyer and seller interfaces. Thus, sellers can review the bid through the seller interface and transmit sell prices to the central station for matching with the bid price.

The software of the invention further comprises a program (525) to monitor the bid and sell prices, to identify conformance between a bid data and a particular seller's sell data, and to identify the corresponding seller. When a conformance occurs, the program automatically alerts the buyer and seller (preferably by e-mail) and automatically

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discontinues the buyer's bid. Depending on the commodity, conformance might require only a match in sell and buy price or may require the seller's commodity to conform with other specifications, such as quality, age, color, or type etc.

The software further comprises a program (530) to automatically transmit a hedge transaction to introducing broker or futures clearing merchant 400 respecting the hedge commodity (selected by the buyer).

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There are many commercial software applications that can enable the communications required by seller interface 200, buyer interface 300, and commodity trading interface 400. Eudora Pro manufactured by Qualcomm Inc., for example, provides editing tools for the creation of messages as well as the communications tools to send the message to the appropriate electronic address. When central station 100 is configured as a Web server, conventional communications software such as Internet Information Server, for delivering web pages, and Internet Explorer, for viewing web pages, by Microsoft Corp. can be used.

Preferably, the software of the invention is Web based and located on a Web server. Software of the invention is readily designed by one of skill in the art or available commercially.

## 5.1.2 Calculation Of The Bid Price By The Buyer

A buyer calculates a bid price based on many different factors and variables including the nature of the commodity sought and the listed hedge commodity, their current exchange rate, market trends, etc. For example, a buyer may calculate his bid price by subtracting a basis from the current exchange rate of a particular listed hedge commodity.

Typically, a grain elevator will calculate a bid price for a desired quantity of grain by subtracting a basis. The basis is the arithmetical difference between the local cash price for the grain and its corresponding futures price listed by the Chicago Board of Trade at a point in time. This allows the elevator to effectively hedge his purchase of grain. Although cash and futures prices do not always parallel one another, often a cash-price shift results in a similar futures shift, particularly if some unexpected event causes a violent price change. The basis may, among other things, reflect the elevator's expenses and allow for a profit. Basis considerations for an elevator purchasing grain might include local supply issues, such as the predicted quality of the coming year's crop and local demand issues, as well as national and world grain indicators. For discussions, see Teweles et al., The Futures Game; Who Wins Who Loses and Why 33 (1987); Henry B. Authur, Commodity Futures as a Business Management Tool 64-69 (1971), both of which are hereby incorporated herein by reference.

## 5.1.3 The Seller's Interface And Posting The Sell Data

Initially, the seller must establish an account with the buyer. Typically this requires the seller to provide name, address, contact information, credit information, etc. The seller will calculate his sell price bases on a number of different factors specific for the commodity he wishes to sell. Cost of delivering the commodity to the buyer upon sale "freight" costs is typically included, particularly in selling agricultural products, such as grain. Thus, a farmer will first calculate a "net" sell price and add a different freight cost depending on the buyer's location.

The seller logs onto central station 100 through the seller interface 300, establishing a communication link by entering a password or seller ID. The seller may be an individual, a corporation, a partnership, a government, or any other entity. In one embodiment, central station 100 has a page on the World Wide Web, allowing the seller to provide information through the interface of conventional Web browser.

The software of the invention allows the seller to access, through seller interface 300, the buyer's platform at central station 100 and to view the buyer's bid price and specifications for the desired commodity. More or less information will be available to the seller depending on the commodity's nature and the buyer's platform policy.

The seller can then enter a firm sell price as well as other required information according to the platform policy. The offer will remain open for a period of time depending on the platform policy.

The seller logs onto the platform (typically hosted and operated by the buyer) and enters information required by the platform policy, such as seller information, quantity, delivery date, sell price, etc. As discussed above, a multitude of sellers can be logged on a buyer's platform and bid against one another.

Authentication of the seller's identity involves central station 100 extracting the seller ID from seller response and looking up the seller's identity in seller table 124. Information in seller table 124 provides an indication of the seller's ability to deliver the goods. If necessary, central station 100 can verify that the seller can provide the specific commodity. In another embodiment, the seller adds in his response to the buyer's bid that a contract is agreed to, for example, a digital signature.

Central station 100 then verifies the status of the bid to determine whether it is still active. In one embodiment, if the bid is still active a unique tracking number can added to seller response. Central station 100 then stores the seller's response. If the bid is not active,

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the seller response is refused by central station 100 and transmitted back to the potential seller.

In another embodiment, the seller transmits the seller response directly to the buyer. The buyer may then send the seller a response through central station 100 for verification and authentication, or he may choose to accept seller response without verification and authentication.

The software and platform of the invention monitors the sell price data and bid price data to detect conformation therebetween. Conformance can occur if, for example, the bid price matches the sell price: (1) seller lowers the sell price to equal the bid price, or (2) the buyer raises the bid until it equals the sell price. The seller can monitor the buyer's bid prices, perhaps adjust his sell price, or simply turn off his computer and wait for the buyer's bid to match the sell price.

An example of what information a seller's interface (here seller A) might display according to the invention is shown in Tables 1.1-1.3 below. Values are included in Table 1 for exemplary purposes. In this example, the seller entered the platform of the invention, for example, by way of a Web page interface, viewed buy data for a plurality of buyers, and chose to offer to sell to buyer's 001, 002, and 003 at a specific price based on the commodity they offered to buy, their location (e.g., to account for delivery costs), their buy price, and other information.

Table 1.1: Seller's Interface For Buyer 001

buver: 001

quantity requested: 100 units delivery date: immediately

delivery location: buyer 001's address

Time	quantity for sale	sell price	buyer's bid	difference
1	100 units	\$10.00/unit	\$9.95/unit	\$0.05
2	100 units	\$10.00/unit	\$9.98/unit	\$0.02
3	100 units	\$10.00/unit	\$10.00/unit	\$0.0 (sold)

Table 1.2: Seller's Interface For Buyer 002

buyer: 002

quantity requested: 100 units delivery date: immediately

delivery location: buyer 002's address

Time	quantity for sale	sell price	buyer's bid	difference
1	100 units	\$10.10/unit	\$9.96/unit	\$0.14
2	100 units	\$10.10/unit	\$9.97/unit	\$0.13
.3	100 units	\$10.10/unit	\$8.80/unit	\$0.30

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Table 1.3: Seller's Interface For Buyer 003

buyer: 003

quantity requested: 100 units delivery date: immediately

delivery location: buyer 003's address

Time	quantity for sale	sell price	buyer's bid	difference
1	100 units	\$10.20/unit	\$9.90/unit	\$0.30
2	100 units	\$10.20/unit	\$9.91/unit	\$0.29
3	100 units	\$10.20/unit	\$9.92/unit	\$0.28

Tables 1.1-1.3 illustrates the general case where a seller A entered a sell price and waited for one of a plurality of buyer's —seeking to purchase seller A's commodity— bid to match the sell price. This occurred at time point 3. At this time, the software would automatically withdraw buyer 001's bid from the platform; notify the conforming buyer and seller of the match, preferably by e-mail; and execute the buyer's hedge transaction. At time point 3, the match could have occurred by either the software and platform of the invention automatically updating the buyer's bid price (e.g., by calculating a new bid price bases on the current exchange rate of a listed commodity) or the buyer manually entered a new, higher bid price that matched seller 001's sell price

### 5.1.4 The Buyer Interface And Posting The Bid Data

The software of the invention allows the buyer to access, through buyer interface 200, the platform at central station 100 where he can: (1) Post a bid data, such as post a bid price for a particular amount of a particular commodity of particular type or quality and instruct the software whether the bid is to be continually updated according to the exchange rate for a particular listed commodity. The buyer can specify the particular quality desired, for example, agricultural products might have to meet certain quality specifications; (2) Program a specific hedge transaction for a particular hedge commodity that the software will automatically execute upon sale consummation; and (3) view information respecting a plurality of sellers, including the sell prices.

Table 3 below is a general example of information that might be displayed on the buyer's interface 200 for a bid to purchase a commodity. The buyer receives a plurality of sell prices for the desired commodity. In this case, three sellers (ID Nos. 001, 002, and 003) have posted offers to sell and sell prices on the buyer's platform.

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Table 2: Buver's Experience

buyer: 001

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quantity requested: 100 units delivery date: immediately

delivery location: buyer 001's address

Seller ID No. 001

Time	quantity for sale	sell price	buyer's bid	difference
	100 units	\$10.00/unit	\$9.95/unit	\$0.05
2	100 units	\$10.00/unit	\$9.98/unit	\$0.02
3	100 units	\$10.00/unit	\$9.50/unit	\$0.50

#### Seller ID No. 002

Time	quantity for sale	sell price	buyer's bid	difference
1	100 units	\$10.50/unit	\$9.95/unit	\$0.55
2	100 units	\$10.50/unit	\$9.98/unit	\$0.52
3	100 units	\$10.50/unit	\$9.50/unit	\$1.00

Seller ID No. 003

Time	quantity for sale	sell price	buyer's bid	difference
1	100 units	\$10.00/unit	\$9.95/unit	\$0.05
2	100 units	\$10.00/unit	\$9.98/unit	\$0.02
3	100 units	\$9.50/unit	\$9.50/unit	\$0.0 (sold)

In the above example, seller 003 sold 100 units of a commodity to the buyer 001 for \$9.50 per unit. The sale was consummated upon the seller's lowering his sell price to match the buyer's bid price. Simultaneously, the buyer's bid was withdrawn from the platform and the hedge transaction programmed by the buyer was automatically executed.

#### 5.1.5 Placing the Hedge transaction

As discussed above, in a preferred embodiment, the software of the invention automatically executes a hedge transaction for the buyer when the sell-price and buy-price data match. The software of the invention prompts the buyer through buyer interface 200 to enter the hedge transaction data, such as the hedge commodity, the amount, and manner in which the transaction is to be executed. Referring to FIG. 3, when the buy data and sell data conform, the software of the invention automatically transmits the hedge order to central station 100 where it is processed as appropriate, for example, electronically directed to introducing broker or futures clearing merchant 400.

The execution can be any means effective to notify an introducing broker or futures clearing merchant to place the order to buy or sell the hedge commodity. For example, the software of the invention can be configured to transmit an electronic mail or voice mail order to an introducing broker or futures clearing merchant. The broker can read the e-mail or

listen to the voice mail and then execute the transaction. Preferably, the software of the invention is configured to directly buy or sell the hedge commodity through a commodities-trading interface (Fig. 3 450). Many exchanges, introducing broker or futures clearing merchants operate trading platforms that instantaneously mediate binding, direct purchase or sale of listed commodities through electronic trading software.

For example, the Chicago Board of Trade's Electronic Open Outcry Market enables futures clearing merchant member firms to electronically manage customer business from both off-floor and on-floor locations. The crucial component is that an electronic customer order ticket (e-ticket) is created during the order initiation phase and new information is added to that original order during the trade execution and trade processing phases.

During the order initiation phase, the order is electronically created by software of the invention through an Internet order entry system. In the trade execution phase, the broker receives the electronic order ticket. The broker executes the order and adds the execution price and opposing firm/broker information to the ticket. The broker also adds trade endorsement data to a flashed-order ticket. Then the tickets are electronically returned to the futures clearing merchant member firm.

In the trade confirmation/processing phase, the futures clearing merchant order entry staff (and Internet customer) receive the electronic trade confirmation. The futures clearing merchant back office also receives that same electronic trade ticket. There, additional account information is automatically downloaded onto the order ticket and the ticket is sent on to clearing for trade matching on a real-time basis.

### 5.2 **DEFINITIONS**

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As used herein, the term "network" means any system of two or more interconnected computers. Examples of networks include, but are not limited to, the Internet and other Wide Area Networks (WANs), and Local Area Networks (LANs).

As used herein, the phrase "network connection" means any channel by which a person, party, or business entity can interface or communicate with a network. Examples of network connections include, but are not limited to, telephone lines by way of internal or external modems, digital subscriber lines ("DSL"), voice mail and voice pages; dedicated data lines; cellular phone communication; communication by way of satellite; and cable television lines.

As used herein, the term "platform" means a system of software and hardware located on a network that performs a function, such as providing services or information and which is accessible through a network interface.

As used herein, the phrase "platform policy" means a set of rules and protocols governing access to and use of services offered on a platform. Platform policies will govern access to and use of services offered through a Web page, voice page, or other network interface. Examples of platform rules include entry of passwords and account information, payment of fees, prohibited use of profane language, methods of payment, and dates when payments are due.

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As used herein, the term "interface" means a displayed or transmitted, user friendly set of pictures, text, or voice statements that provide instructions and protocols indicating how a user is to communicate and interact with a platform. For example, an interface allows a user to direct computer software located on the user's computer or within a network. Examples of interfaces include, but are not limited to, Web pages, e-mail transmittals, voice pages, voice mail instructions, and facsimile transmissions (fax). An interface is displayed or provided by an "interface provider", for example, a personal computer displaying a Web page interface.

As used herein, the term "automatically" means execution by computer software upon occurrence of an event or satisfaction of a condition without instruction from or intervention of a user.

As used herein, the term "buyer" means any person, party, or business entity that desires to purchase a commodity.

As used herein, the term "seller" means any person, party, or business entity that desires to sell a commodity.

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As used herein, the term "commodity" means any good or service that can be purchased.

As used herein, the phrase "listed commodity" means any commodity that is listed on an exchange. Exchanges include, but are not limited to United States exchanges, for example, American Stock Exchange, Chicago Board of Exchange, Chicago Board of Trade, Chicago Mercantile Exchange, Coffee, Sugar & Cocoa Exchange, Currenex (currency exchange), Futurecom: Electronic Trading Exchange, International Securities Exchange (options), NASDAQ Stock Market, New York Board of Trade, New York Cotton Exchange, New York Mercantile Exchange, New York Stock Exchange, OTC Bulletin Board, Arizona Stock Exchange, Boston Stock Exchange, Chicago Stock Exchange, Cincinnati Stock

Exchange, Iowa Electronic Markets. Kansas City Board of Trade, Mid America Commodity Exchange, Minneapolis Grain Exchange, Pacific Exchange, Philadelphia Stock Exchange. San Diego Stock Exchange, Archipelago (ARCA), Attain (ATTN), Bloomberg Tradebook (BTRD), GlobeNet, Island (ISLD), Instinet (INCA), MarketXT, NexTrade (NTRD), onExchange, Primex, REDIbook (REDI), and Strike (STRK); Canada exchanges, such as Canadian Venture Exchange (merger of the Alberta and Vancouver exchanges), Montreal Exchange (Bourse de Montréal), Nasdaq-Canada, Toronto Stock Exchange, Winnipeg Commodity Exchange, and Winnipeg Stock Exchange; European exchanges, for example, EASDAQ (see NASDAQ Europe), Eurex: The European Derivatives Market, Euronext (merger of the Amsterdam, Brussels, and Paris exchanges), International Petroleum Exchange, Jiway.com, NASDAQ Europe; Austrian Exchanges, for example, NEWEX, and Wiener Börse (Vienna Stock Exchange and Austrian Futures & Options Exchange); French exchanges, for example, Bourse de Paris (see Euronext), Marche a Terme International de France (MATIF), Marche des Options Negociables de Paris (MONEP), and Nouveau Marché; German exchanges, for example, Baden-Württembergische Wertpapierbörse zu Stuttgart, Bayerische Börse (Munich), Berliner Wertpapierbörse (Berlin Stock Exchange), Bremer Baumwollbörse (Bremen Cotton Exchange), Deutsche Börse, Hamburger Börse, Neuer Markt, Rheinisch-Westfälische Börse zu Düsseldorf, SMAX (small caps). Warenterminbörse Hannover (Commodity Exchange Hannover), and Xetra: an ECN; Russian exchanges, for example, Inter-Republican Universal Commodity Exchange (Offline 2 May 2001), Moscow Interbank Currency Exchange, Moscow Central Stock Exchange, Moscow Stock Exchange, Nijny Novgorod Stock and Currency Exchange, Russian Exchange, Russian Trading System, St. Petersburg Futures Exchange, St. Petersburg Monetary Exchange, St. Petersburg Stock Exchange, Siberian Interbank Currency Exchange, Siberian Stock Exchange (Under construction), Ural Stock Exchange, and FCSM of Russia Information Disclosure Program (Russian EDGAR); The Switzerland Swiss Exchange; English exchanges, for example, Baltic Exchange, E-Crossnet: an ECN, London Clearing House: an ECN, London International Financial Futures and Options Exchange, London Metal Exchange, London Securities and Derivatives Exchange, London Stock Exchange, and virt-x (formerly Tradepoint Stock Exchange); Australian exchanges, for example, Australia Australian Stock Exchange, Bendigo Stock Exchange, Stock Exchange of Newcastle, Sydney Futures Exchange; Chinese exchanges, such as, China-Commodity Futures Exchange of Hainan (Offline Jan 2002), Dalian Commodity Exchange, Shanghai Futures Exchange, Shanghai Metal Exchange, Shanghai Stock Exchange, Shenzhen Metal Exchange, Shenzhen

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Stock Exchange. Tianjin United Futures Exchange, and Zhengzhou Commodity Exchange. Chinese Gold & Silver Exchange Society, Growth Enterprise Market, and Hong Kong Exchanges (Hong Kong Futures Exchange, Stock Exchange of Hong Kong); Japanese exchanges, such as, Central Japan Commodity Exchange (Chubu Commodity Exchange, Nagoya Textile Exchange)), Hiroshima Stock Exchange, Fukuoka Futures Exchange, JASDAQ, Kanmon Commodity Exchange (Offline Jan 2002), Kansai Commodities Exchange (Osaka Grain Exchange, Osaka Sugar Exchange, Kobe Grain Commodities Exchange, and Kobe Raw Silk Exchange), NASDAQ-Japan, Nagoya Stock Exchange, Osaka Mercantile Exchange (Osaka Textile Exchange, Kobe Rubber Exchange), Osaka Securities Exchange, Tokyo Commodity Exchange, Tokyo Grain Exchange, Tokyo International Financial Futures Exchange, Tokyo Stock Exchange, and Yokohama Commodity Exchange.

Examples of listed commodities include, but are not limited to, stocks; bonds; futures, such as grain futures, including corn, wheat, barley, and milo; treasury notes; treasury bills; currency; precious metals; derivatives.

As used herein, the phrase "exchange rate" means the price listed by an exchange for a listed commodity at a particular time.

As used herein, the term "bid data" means the bid price a buyer is offering to purchase a commodity and, optionally, other relevant information, such as quantity sought, quality, delivery date, and delivery place etc.

As used herein, the term "sell data" means the sell price a seller is offering to sell a commodity and, optionally, other relevant information, such as quantity for sale, quality, proposed delivery date and place etc. A "sell data parcel" is the sell data associated with a particular seller.

As used herein, the term "purchase commodity" means any commodity that a buyer wishes to buy.

As used herein, the term "hedge commodity" means a listed commodity (listed on an exchange) having a current exchange rate with which a buyer wishes to hedge the buy of the purchase commodity.

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### 6. EXAMPLES

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## 6.1 EXAMPLE 1

Tables 3.1 to 3.4 illustrate an example where a seller (farmer) seeks to sell 10,000 bushels of grain to various buyers (grain elevators). The tables show information that might be displayed on the farmer's interface 300 according to the invention. The farmer calculates a net sell price based on the costs of growing and harvesting the crop and accounting for desired profits (in this example \$1.81/bushel). The farmer logs onto the platform (e.g., Web page) and views data for a number of buyers including bid price, quantity, and other information. The farmer then selects four buyers (Nos. 001-004) at four different locations (in this case grain elevators) for which to place bid data and posts his net sell price of \$1.81/bushel and a freight cost corresponding to the particular buyer's location. As indicated by the Tables 2.1-2.4, the platform automatically calculates the farmers sell price by subtracting the freight price from the net price. The platform also continually calculates and updates the buyer's bid by subtracting a basis from the current value of December grain futures price as listed by the Chicago Board of Trade. Accordingly, the bid price may be raised: (a) by reducing the basis; or (b) the futures market for the commodity increases to a level such that the bid price matches the selling price after subtracting the basis. The software of the invention updates the seller's interface continually.

Table 3.1: Grain Seller's Interface At Time 1

quant. to sell	Buyer No. and (location)	net price	freight	sell price	Dec. Futures Price	buyer's basis	buyer's bid	diff.
10,000	001 (Decatur)	\$1.80	0.02	\$1.82	\$2.20	\$-0.44	\$1.76	\$0.06
10,000	002 (Peoria)	\$1.80	0.03	\$1.83	\$2.20	\$-0.45	\$1.75	\$0.08
10,000	003 (Faribault)	\$1.80	0.04	\$1.84	\$2.20	\$-0.46	\$1.74	\$0.1
10,000	004 (Boise)	\$1.80	0.01	\$1.81	\$2.20	\$-0.47	\$1.73	\$0.8

\*prices and quantities are in bushels

Table 3.2: Grain Seller's Interface At Time 2

quant. to sell	Buyer No. and (location)	net price	freight	sell price	Dec. Futures Price	buyer's basis	buyer's bid	diff.
10,000	001 (Decatur)	\$1.80	0.02	\$1.82	\$2.22	\$-0.44	\$1.78	\$0.04
10,000	002 (Peoria)	\$1.80	0.03	\$1.83	\$2.22	\$-0.45	\$1.77	\$0.06
10,000	003 (Faribault)	\$1.80	0.04	\$1.84	\$2.22	\$-0.46	\$1.76	\$0.08
10,000	004 (Boise)	\$1.80	0.01	\$1.81	\$2.22	\$-0.47	\$1.75	\$0.06

Table 3.3: Grain Seller's Interface At Time 3

quant. to sell	Buyer No. and (location)	net price	freight	sell price	Dec. Futures Price	buyer's basis	buyer's bid	dırf.
10,000	001 (Decatur)	\$1.80	0.02	\$1.82	\$2.23	S-0.44	\$1.79	\$0.03
10.000	002 (Peoria)	\$1.80	0.03	\$1.83	\$2.23	\$-0.45	\$1.78	\$0.05
10.000	003 (Faribault)	\$1.80	0.04	\$1.84	\$2.23	\$-0.46	S1.77	S0.07
10.000	004 (Boise)	\$1.80	0.01	\$1.81	\$2.23	\$-0.47	\$1.74	50.05

Table 3.4: Grain Seller's Interface At Time 4

quant. to sell	Buyer No. and (location)	net price	freight	sell price	Dec. Futures Price	buyer's basis	buyer's bid	diff.
10,000	001 (Decatur)	\$1.80	0.02	\$1.82	\$2.26	\$-0.44	\$1.82	\$0.00 (sold)
10,000	002 (Peoria)	\$1.80	0.03	\$1.83	\$2.26	\$-0.45	\$1.81	\$0.02
10,000	003 (Faribault)	\$1.80	0.04	\$1.84	\$2.26	\$-0.46	\$1.80	\$0.04
10,000	004 (Boise)	\$1.80	0.01	\$1.81	\$2.26	\$-0.47	\$1.79	\$0.03

In this example, the grain seller waited for the futures price to rise to a level such that when elevator 001 subtracted his basis at time 4, the bid price and the sell price matched. At time 4, the bid data conformed to the sell data and both farmer and elevator were notified by e-mail that the farmer was willing to sell and the elevator was willing to buy 10,000 bushels of grain for \$1.82/bushel. Simultaneously, buyer 001's bid was automatically withdrawn from the view of other sellers and the buyer 001's hedge transaction was automatically executed.

### 6.2 EXAMPLE 2

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Tables 4.1-4.4 below illustrate a specific example of information that might be displayed on grain elevator 001's interface upon posting an offer to buy 10,000 bushels of grain on the platform to be delivered in Decatur in October. The elevator chose December grain futures to calculate his bid price. The platform of the invention automatically and continually updates the elevator's bid price by subtracting his basis from the current futures price listed by the Chicago Board of Trade.

As a hedge transaction, the elevator instructed the platform to sell a futures contract for 10,000 bushels of grain from a current futures clearing merchant (for a transaction fee of course) at the Chicago Board of Trade's futures price at the time a sale is consummated with a seller. The buyer calculated the basis to include the cost of the transaction fee, storage costs, elevation costs, other operation costs, and his desired profit.

Table 4.1: Grain Elevator 001's Interface At Time 1

Seller	quantity	sell price	Dec. Futures Price	elevator's basis	buver's bid	diff.
Α	10,000	\$1.82	\$2.20	\$-0.44	\$1.76	\$0.06
В	10,000	\$1.83	\$2.20	\$-0.44	\$1.76	: S0.07
C	10,000	\$1.84	\$2.20	: S-0.44	\$1.76	50.08
D	10.000	\$1.85	\$2.20	! \$-0.44	\$1.76	\$0.09

<sup>\*</sup>Prices and quantities are in bushels

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Table 4.2: Grain Elevator 001's Interface At Time 2

Seller	quantity	sell price	Dec. Futures Price	elevator's basis	buyer's bid	diff.
A	10,000	\$1.82	\$2.22	\$-0.44	\$1.78	\$0.04
В	10,000	\$1.83	\$2.22	\$-0.44	\$1.78	\$0.05
С	10,000	\$1.84	\$2.22	\$-0.44	\$1.78	\$0.06
D	10,000	\$1.85	\$2.22	\$-0.44	\$1.78	\$0.07

Table 4.3: Grain Elevator 001's Interface At Time 3

Seller	quantity	sell price	Dec. Futures Price	elevator's basis	buyer's bid	diff.
Α	10,000	\$1.82	\$2.23	\$-0.44	\$1.79	\$0.03
В	10,000	\$1.83	\$2.23	\$-0.44	\$1.79	\$0.04
С	10,000	\$1.84	\$2.23	\$-0.44	\$1.79	\$0.05
D_	10,000	\$1.85	\$2.23	\$-0.44	\$1.79	\$0.06

Table 4.4: Grain Elevator 001's Interface At Time 4

Seiler	quantity	sell price	Dec. Futures Price	elevator's basis	buyer's bid	diff.
Α	10,000	\$1.82	\$2.24	\$-0.44	\$1.82	\$0.00 (sold)
В	10,000	\$1.83	\$2.24	\$-0.44	\$1.82	\$0.01
С	10,000	\$1.84	\$2.24	\$-0.44	\$1.82	\$0.02
D	10,000	\$1.85	\$2.24	\$-0.44	\$1.82	\$0.03

At time 4, the farmer A's sell data conformed to the elevator 001's bid data. Farmer A and elevator 001 were both notified of the conformance by e-mail that farmer A was willing to sell 10,000 bushels of grain for \$1.82/bushel to elevator 001 and deliver the grain to elevator 001 in Decatur in October. Simultaneously, the elevator 001's bid was automatically withdrawn from the view of farmers C, D, and E. Also simultaneously, the elevator 001's hedge was automatically executed to sell a futures contract for 10,000 bushels of grain for \$2.24/bushel electronically through a current futures clearing merchant. The net effect was that elevator 001 purchased 10,000 bushels of grain for 1.82/bushel from farmer "A" for a net cost of \$18,200 and sold 10,000 bushels of grain at \$2.25/bushel (i.e., the hedge futures sell contract) for a gross of \$22,500. The difference reflects the basis of \$-0.44 or \$4,300, which accounts for the elevator's profits and costs.

After purchase of the grain, the grain elevator will likely sell the grain at the local cash price, realize the profit built into his basis, and buy back his futures contract to sell

10,000 bushels of grain at the current futures price. Optimally, the futures price should track the local cash price. Thus, if a sudden fall in the local cash price for grain at the time the elevator sought to sell the grain, he would be hedged by his futures contract.

### 7. CONCLUSION

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From the above description and examples, it is clear that in one embodiment, the invention is directed to a method for purchasing a commodity comprising:

- (a) providing bid data for the commodity on a network platform, the bid data provided by a buyer;
- (b) providing one or more sell data parcels for the commodity on the network platform, each sell data parcel corresponding to a particular seller;
- (c) providing hedge transaction information respecting a listed hedge commodity, the hedge transaction provided by the buyer;
  - (d) monitoring the bid data and the one or more sell data parcels;
- (e) automatically identifying a conforming sell data parcel, which conforms to the bid data; and
  - (f) automatically executing the buyer's hedge transaction.

In another embodiment, the invention relates to a system for purchasing a commodity comprising:

(i) a memory storage device;

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- (ii) a processor connected to the storage device;
- (iii) a program for controlling the processor; wherein the memory storage device and the processor are operative with the program to:
- (a) provide bid data for the commodity on a network platform, the bid data provided by a buyer;
- (b) provide one or more sell data parcels for the commodity on the network platform, each sell data parcel corresponding to a particular seller;
- (c) provide hedge transaction information respecting a listed hedge commodity, the hedge transaction provided by the buyer;
  - (d) monitor the bid data and the one or more sell data parcels;
- (e) automatically identify a conforming sell data parcel, which conforms to the bid data; and
  - (f) automatically execute the buyer's hedge transaction.

In still another embodiment, the invention is directed to a computer readable medium encoded with a computer program that causes a system comprising a memory storage device and a processor to perform the steps of:

- (a) providing bid data for the commodity on a network platform, the bid data provided by a buyer;
- (b) providing one or more sell data parcels for the commodity on the network platform, each sell data parcel corresponding to a particular seller;
- (c) providing hedge transaction information respecting a listed hedge commodity, the hedge transaction provided by the buyer;
  - (d) monitoring the bid data and the one or more sell data parcels;
- (e) automatically identifying a conforming sell data parcel, which conforms to the bid data; and
  - (f) automatically executing the buyer's hedge transaction.

Although the present invention has been described in considerable detail with reference to certain preferred embodiments, versions, and Examples other versions and embodiments are possible. Therefore, the spirit and scope of the appended claims should not be limited to the description of the versions and embodiments expressly disclosed herein.

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#### What is claimed is:

- 1. An Internet based system for facilitating commercial transactions between producers of agricultural commodities and intermediaries who purchase agricultural commodities from the producers, comprising:
  - (a) a first computing sub-system configured to receive electronic communications from an intermediary;
  - (b) a memory associated with the first computing sub-system wherein the memory includes information relating to the intermediary including an agricultural commodity desired to be purchased, a quantity of the agricultural commodity desired to be purchased, and a basis price for the agricultural commodity desired to be purchased,
    - (i) wherein the communications received from the intermediary will selectively affect the information relating to the intermediary;
  - (c) a second computing sub-system operatively coupled to the first computing subsystem and the memory, the second computing sub-system configured to selectively request data from a commodities exchange, wherein the data includes a current trading price of the commodity;
  - (d) a third computing subsystem configured to generate at least a portion of a web page specific to the intermediary based upon the information stored in the memory and the data obtained from the commodities exchange,
    - (i) wherein the second computing subsystem can transmit the web page to a producer of an agricultural commodity, wherein the web page includes the quantity of the agricultural commodity desired to be purchased by the intermediary, and a flat price for the commodity
    - (ii) wherein the third computing subsystem calculates the flat price by adding the basis provided by the intermediary from the current trading price obtained from the commodities exchange;
  - (e) and a fourth computing sub-system operatively coupled to the first, second and third computing sub-systems, the fourth computing subsystem configured to receive responses from producers indicating an ability to deliver an available quantity of the commodity to the intermediary and
    - (i) to communicate with the commodities exchange on behalf of the intermediary in order to attempt to obtain a futures contract for the commodity in an amount as close as possible to (within pre-set parameters), but not exceeding the available quantity and to generate a contract between the producer and the intermediary.
- 2. The system of claim 1, wherein the second computing subsystem periodically requests updated information about the current trading price of the commodity.
- 3. The system of claim 2, wherein the periodic requests occur at a rate to generate a near

real-time correlation to the trading price as posted by the commodities exchange.

- 4. The system of claim 3, wherein the web page made available to the producer is updated so as to provide a near real time correlation between fluctuations occurring on the commodities exchange and a resulting change in the flat price.
- 5. A system for facilitating commercial transactions, comprising:
  - (a) a first computing sub-system configured to receive communications from a logically external intermediary;
  - (b) a memory associated with the first computing sub-system wherein the memory includes information relating to the intermediary,
    - (i) wherein the communications received from the intermediary will selectively affect the information relating to the intermediary;
  - (c) a second computing sub-system operatively coupled to the first computing subsystem and the memory, the second computing sub-system configured to selectively request data from an external source
    - (i) and further configured to generate an exchange structure specific to the intermediary based upon the information stored in the memory for the intermediary and the data obtained from the external source, wherein
    - (ii) the second computing subsystem can transmit the exchange structure to a third party;
  - (d) a third computing sub-system operatively coupled to the first and second computing sub-systems, the third computing subsystem configured to facilitate commercial transactions between the third party and the intermediary and
    - (i) to automatically engage in a commercial transaction with a centralized exchange on behalf of the intermediary.
- 6. The system of claim 5, wherein the information includes a basis price and the data includes a trading price, wherein the second computing sub-system calculates a fixed price based upon the basis price and the trading price, and the fixed price is presented in the exchange structure.
- 7. The system of claim 6 wherein the trading price is repeatedly obtained from the external source over a time period and the fixed price is recalculated each time the trading price is obtained.
- 8. The system of claim 7 wherein the fixed price is determined and updated at a near real time rate as compared to a posting of the trading price by the centralized exchange.
- 9. The system of claim 5 wherein the commercial transaction that is automatically

engaged in on behalf of the intermediary is the selling of a futures contract on the centralized exchange.

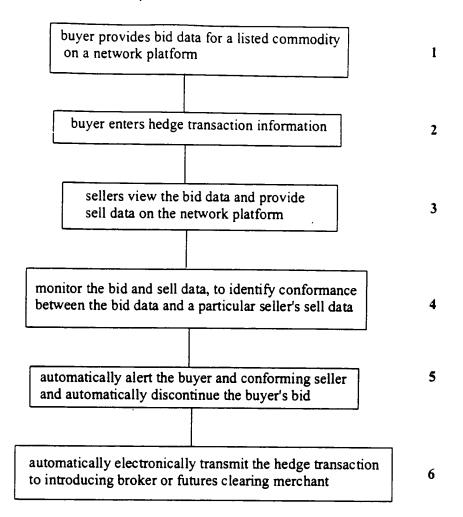
- 10. The system of claim 6 wherein the commercial transaction that is automatically engaged in on behalf of the intermediary is the selling of a futures contract on the centralized exchange.
- 11. The system of claim 10, wherein terms of the futures contract are based upon a trading price on the commodities exchanges that was utilized to calculate the fixed price.
- 12. The system of claim 6, wherein the intermediary is a purchaser of commodities and the third party is a producer of commodities.
- 13. The system of claim 12 wherein the commercial transaction between the producer of commodities and the purchaser of commodities is an agreement that the producer will sell a quantity of a commodity to the purchaser.
- 14. The system of claim 13 wherein a maximum amount of the commodity desired by the purchaser is included in the information in the memory and after an agreement is made between a purchaser and a producer, the second computing sub-system updates the information to reduce the maximum amount of the commodity desired.
- 15. A method of facilitating commercial transactions between a first class of participants and a second class of participants, utilizing a system having a centralized electronic information exchange, accessible to the first class of participants wherein information specifically pertaining to each of the second class of participants is available, and members of the second class of participants have limited access to the system to provide and update the information that specifically pertains to the members, comprising:
  - (a) obtaining pricing data from a centralized source;
  - (b) receiving bids from the second class of participants, wherein
    - (i) a posted offer is generated by the system based in part on the information provided and in part based upon the data obtained;
  - (c) displaying the generated offer on the centralized electronic information exchange;
  - (d) receiving a response from a given member of the first class of participants to the generated offer for a given member of the second class of participants;
  - (e) communicating with the centralized source to attempt to generate a hedging transaction on behalf of the given member of the second class of participants;
     and

- (f) generating a contract between the given member of the first class of participants and the given member of the second class of participants.
- 16. The method of claim 15, wherein the contract is generated without requiring further input from the given member of the first class of participants or the given member of the second class of participants.
- 17. The method of claim 15, wherein the centralized source is a commodities exchange and the hedging transaction is an attempt to sell a futures contract on the commodities exchange.
- 18. The method of claim 15, wherein the first class of participants are producers of a commodity and the first party patrons are purchasers of the commodity.
- 19. The method of claim 15, further comprising: resubmitting a request for the pricing data from the centralized source at a periodic interval; and recalculating the generated offer based upon the most recent pricing data.
- 20. The method of claim 19, where the request is continuously resubmitted so as to receive at least near real time pricing data from the centralized source.
- 21. A system for facilitating commercial transactions between first parties and second parties, comprising:
  - a first computing subsystem configured to receive information from one first party, sufficient to generate an offer for specified quantities of an item,
    - (i) to display the offer upon request, and to interact with one second party on behalf of the one first party
    - (ii) to generate a contract for an amount of the item without requiring further interaction from the one first party;
  - (b) a second computing sub-system operatively coupled to the first computing subsystem and configured to automatically communicate with a centralized exchange to initiate the placement of a hedging order on behalf of the one first party.
- 22. The system of claim 21, wherein the hedging order is a futures contract to sell a quantity of the item as close to, without exceeding the amount of the item.
- 23. A server based system for facilitating transactions between buyers of a commodity and sellers of a commodity, comprising:
  - (a) a server system configured to receive input from one or more buyers including information relating to a quantity of a commodity desired and a basis price,

- (b) to communicate with a commodities exchange to obtain pricing information relating to the commodity,
- (c) to calculate a flat price for each buyer based on the provided basis price and the obtained pricing information, to provide the calculated flat price and an offer associated with it to a seller when requested,
- (d) to periodically communicate with the commodities exchange to update the pricing information,
- (e) to receive responses from a given seller indicating an acceptance of a given offer from a given buyer,
- (f) to communicate with the commodities exchange on behalf of the given buyer to attempt to sell a futures contract based on the given offer, and
- (g) to generate a contract between the given seller and the given buyer.
- 24. A method for allowing a purchaser of a commodity to post information relating to bids to purchase commodities on a system and to have the system act on behalf of the purchaser in contracting with a seller of the commodity and in contracting with a futures commission merchant to obtain a futures contract, comprising:
  - (a) determining a quantity of a commodity to purchase; determining a basis price for the commodity; and posting the quantity and the basis price on a system configured to obtain a current trading price for the commodity from a commodities exchange,
  - (b) determine a flat price based on the basis price and the trading price.
  - (c) deliver the determined price and the quantity to the seller, receive an offer from the seller,
  - (d) initiate communication with the futures commission merchant and negotiate a futures contract.
  - (e) and generate a contract between the purchaser and the seller.

## ABSTRACT:

The invention is directed to methods and systems for commodities procurement with concomitant hedging. The invention enables automatic commodity purchase at a desired basis level when a seller's price matches a buyer's basis bid and concomitantly automatically placing an electronic commodities order to hedge the buyer's purchase.



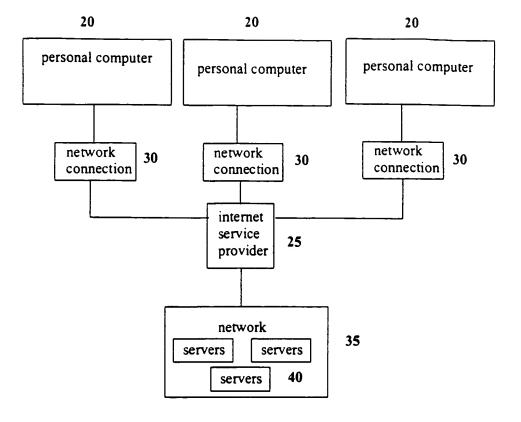


FIG. 2a

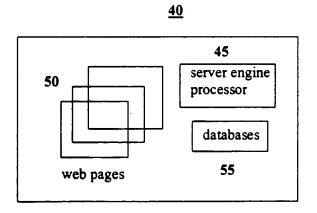


FIG. 2b

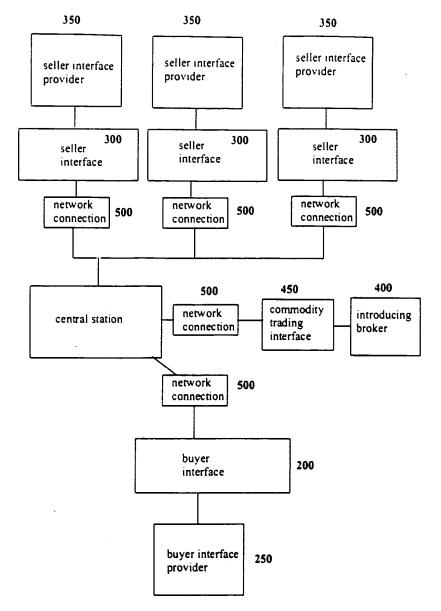


FIG. 3

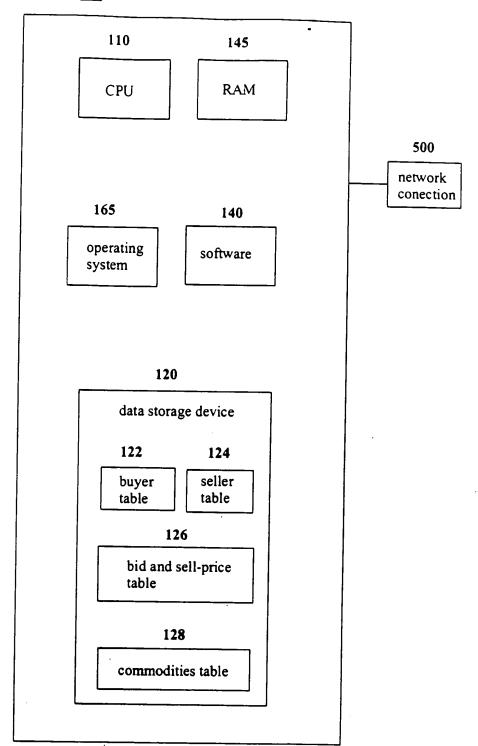


FIG. 4

program to receive and transmit real-time commodity exchange-rate quotes from an exchange or broker	50
program to automatically calculate buyer bid based on the exchange-rate quote for a commodity	51
database for receiving dynamic data	51
program for displaying, entering, and transmitting bid and sell price data to the buyer and seller interfaces	52
program to identify when sell data conforms to bid data; withdraw buyer bid; and alert the buyer and seller of the match	52
program to automatically transmits a hedge transaction to an introducing broker or futures clearing merchant	530

FIG. 5: software

## JOINT DECLARATION AND POWER OF ATTORNEY

As a below-named joint inventor, I hereby declare that:

My residence, post office address, and citizenship are as recited below next to my respective name.

I believe I am an original, first, and joint inventor of the subject matter that is claimed and for which a patent is sought in the invention entitled METHODS AND SYSTEMS FOR PURCHASE OF COMMODITIES, and for which a utility patent application has been filed on August 1, 2002 and assigned Serial No. 10/209,994.

I hereby acknowledge that I have reviewed and understand the contents of the above-identified application, including the claims and drawings.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37 Code of Federal Regulations §1.56. As stated therein, information is material to patentability when it is not cumulative to information already of record in the file of the above-identified application or being made of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) it refutes, or is inconsistent with, a position we take in: (i) opposing an argument of unpatentability relied upon by the Office, or (ii) asserting an argument of patentability.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or Inventor's Certificate, or Section 356(a) of any PCT international application that designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or Inventor's Certificate or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application	Country	Date Filed	Priority Not Claimed
			=

I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) listed below:

Application Serial No.	Date Filed

I hereby claim the benefit under 35 U.S.C. Section 120 of any United States applications(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior Unites States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. Section 112. I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, C.F.R. section 1.56 that became available between the filing date of the prior application and the national or PCT International filing date of this application:

Application Serial No.	Filing Date		Status
		=	Patented
		0	Pending
		J	Abandoned
		10	Patented
			Pending
			Abandoned
	****		Patented
		a	Pending
<u> </u>			Abandoned

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As (a) named inventor(s), I/we hereby appoint the following attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith: Stephen R. Buckingham (40,538), Glen E. Books (24,950), Joseph M. Geller (48,144), and Alex R. Pagano (44,994) all of Lowenstein Sandler PC.

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